

IN THE SPECIFICATION

Please replace the paragraph on page 1, line 30 with the following amended paragraph:

A n-type, p-type, or undoped $\nabla_x[\text{In}_x(\text{Al}_y\text{Ga}_{1-y})_{1-x}\text{P}]$ graded buffer 8 is deposited atop a GaP substrate 6 to form a platform. As the indium fraction in the graded buffer 8 increases the bandgap will decrease; the inclusion of aluminum in the graded buffer 8 counters this effect by increasing both E_g and E_o , thereby maintaining transparency. A $\text{In}_x(\text{Al}_y\text{Ga}_{1-y})_{1-x}\text{P}$ layer 10, where $0.1 \leq x \leq 0.4$ and $0 \leq y \leq 1$, is formed on the graded buffer 8, with a lattice constant between approximately 5.49 Å and 5.62 Å, and becomes the lower clad region of the device active layer. The indium fraction in the layer 10 may be varied to suit the desired active region 4 emission energy, and the layer 10 can be n-doped or p-doped. A separate confinement heterostructure 12 (SCH) includes said separate InGaP or InAlGaP that is approximately lattice-matched to the clad layer 10., and is approximately lattice-matched to the underlying layer 10. The strained quantum-well active region 4 comprises of an $\text{In}_x(\text{Al}_y\text{Ga}_{1-y})_{1-x}\text{P}$ strained quantum-well active region, where x is selected to produce a direct bandgap InGaP alloy in the range of $0.27 \leq x \leq 0.50$ and $0 \leq y \leq 1$. This quantum well composition should not have a lattice constant that exceeds strain levels that would prevent continuous film growth and can either be n-doped or p-doped.